

## **ABSTRACT OF THE DISCLOSURE**

A system and method for increasing resolution of pulse width modulated (PWM) signal duty cycle calculations in a fan speed control system operating to control rotational speed of at least one fan. The method may comprise obtaining a temperature reading  
5 from a first temperature sensor in the fan speed control system during a first time period. The temperature reading has resolution of a first number of bits. A portion of the first number of bits is selected for calculating a PWM signal duty cycle with the resolution of the first number of bits in the temperature reading using only the portion of the first number of bits and zone parameters associated with the first temperature sensor. The  
10 PWM signal duty cycle may then be converted into a PWM signal that may be provided to the at least one fan.